# PATENT COOPERATION TREATY

# **PCT**

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Artcle 36 and Rule 70)

| · · · · · · · · · · · · · · · · · · ·  |   |   |  |                                       |  |  |
|--|---|---|--|---------------------------------------|--|--|
| Applicant's or agent's file reference S03-00+ 3co PcT                        | FOR FURTHER ACTION  | ACTION SeeNotificationofTransmittalofInternationalPreliminar Examination Report (Form PCT/IPEA/416) |  |                                       |  |  |
| International application No. PCT/KR2003/001813                              | International filing date(day/mood SEPTEMBER 2003 (   | •   | Priority date (day/month/y 23 JUNE 2003 (23.06.20)   | 1                                     |  |  |
| International Patent Classification (IPC)                                    |   |   |  |                                       |  |  |
| IPC7 G09G 3/20, G06F   | 3/00, G02F 1/133, F   | 103K 19/01  | 175  |                                       |  |  |
| SYNCOAM CO., LTD. et al  |   |   |  |                                       |  |  |
| This international preliminary example and is transmitted to the applicant   | according to Article 36.  |   |  | ning Authority                        |  |  |
| 2. This REPORT consists of a total of  |   |   |  |                                       |  |  |
| amended and are the basis f  | anied by ANNEXES, i.e., sheets<br>for this report and/or sheets con-<br>e Administrative Instructions un- | taining rectification   | n, claims and/or drawings vons made before this Auth | vhich have been<br>nority (see Rule ' |  |  |
| These annexes consist of a total of  | of sheets.  |   |  |                                       |  |  |
| 3. This report contains indications re                                       | elating to the following items:   |   |  |                                       |  |  |
| l Basis of the report  |   |   |  |                                       |  |  |
| II Priority  |   |   |  |                                       |  |  |
| L  | of opinion with regard to novelty   | , inventive step a  | nd industrial applicability                          |                                       |  |  |
| Lack of unity of inv   |   |   | at a sector constraint                               | al Harri                              |  |  |
|  | t under Article 35(2) with regard ations supporting such statement  |   | itive step or industrial applic                      | caomiy:                               |  |  |
| VI Certain documents cited   |   |   |  |                                       |  |  |
| VII Certain defects in th  | e international application   |   |  |                                       |  |  |
| VIII Certain observations on the international application                   |   |   |  |                                       |  |  |
|  |   |   |  |                                       |  |  |
|  |   |   |  |                                       |  |  |
|  |   |   |  |                                       |  |  |
| D  | Data  | of completion of  | 'this report   |                                       |  |  |
| Date of submission of the demand   | Date  | or completion of  | tilis report   |                                       |  |  |
| 24 FEBRUARY 2004   | (24.02.2004)  | 26 SEPTEM   | BER 2005 (26.09.2005)                                |                                       |  |  |
| Name and mailing address of the IPEA/  | KR Auth   | orized officer  |  | for mine                              |  |  |
| Korean Intellectual Propert<br>920 Dunsan-dong, Sco-gu.<br>Republic of Korea | ty Office   | JEONG, Jae He   | on   | (점세언)                                 |  |  |
| Facsimile No. 82-42-472-7140   | Tele  | phone No. 82-4  | 2-481-5672   |                                       |  |  |

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

| PC. | Γ/ | 'K | R | 20 | 03 | /00 | 1 | 8 |
|-----|----|----|---|----|----|-----|---|---|
|     |    |    |   |    |    |     |   |   |

| I. | Basis   | of the report   |   |
|----|---------|---|---|
| t. | With    | regard to the elements of the international application:*   |   |
|    |         | the international application as originally filed   |   |
|    |         | the description:  |   |
|    |         | pages   | , as originally filed . filed with the demand |
|    |         | pages, filed with the letter of   | , med with the demand                         |
|    |         | the claims:   |   |
|    | Ш       | pages   | _ as originally filed                         |
|    |         | pages, as amended (together with an   | y statment) under Article 19                  |
|    |         | pages, filed with the letter of   | , filed with the demand                       |
|    |         |   |   |
|    | لسيا    | the drawings: pages   | _ , as originally filed                       |
|    |         | pages   |   |
|    |         | pages, filed with the letter of   |   |
|    |         | the sequence listing part of the description:   | as anisimally (Slad                           |
|    |         | pagespages  |   |
|    |         | pages   |   |
| 2. | the i   | regard to the language, all the elements marked above were available or furnished to this Authoriternational application was filed, unless otherwise indicated under this item.  is elements were available or furnished to this Authority in the following language  the language of a translation furnished for the purposes of international search (under Rule 23 | which is                                      |
|    |         | the language of publication of the international application (under Rule 48.3(b)).  |   |
|    |         | the language of the translation furnished for the purposes of international preliminary examinary or 55.3).   | ination(under Rules 55.2 and/                 |
| 3. |         | h regard to any nucleotide and/or amino acid sequence disclosed in the international appliminary examination was carried out on the basis of the sequence listing:  | ication, the international                    |
|    |         | contained inthe international application in written form.  |   |
|    |         | filed together with the international application in computer readable form.  |   |
|    |         | furnished subsequently to this Authority in written form.   |   |
|    |         | furnished subsequently to this Authority in computer readable form  |   |
|    |         | The statement that the subsequently furnished written sequence listing does not go be international applicationas as filed has been furinshed.  | yond the disc losure in the                   |
|    |         | The statement that the information recorded in computer readable form is identical to the vibeen furnished.   | written sequence listing has                  |
| 4. |         | The amendments have resulted in the cancellation of:  |   |
|    |         | the description, pages  |   |
|    |         | the claims, Nos.  |   |
|    |         | the drawings, sheets  |   |
| 5. |         | This report has been established as if (some of) the amendments had not been made, sinc go beyond the disclosure as filed, as indicated in the Supplemental Box(Rule 70.2(c)).**  | e they have been considered to                |
| *  | in thi. | scement sheets which have been furnished to the receiving Office in response to an invitation un<br>sopinion as "originally filed." and are not annexed to this report since they do not contain<br>0.17).  |   |
| *1 | ' Any r | eplacement sheet containing such amendments must be referred to under item I and annexed to   | o this report.                                |

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### INTERNATIONAL PRELIMINARY EXAMINATION

International application No.
PCT/KR2003/001813

| <ul> <li>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;</li> <li>citations and explanations supporting such statement</li> </ul>  |                  |  |  |  |  |  |
|---|------------------|--|--|--|--|--|
| 1. Statement  |                  |  |  |  |  |  |
| Novelty (N)   | Claims           | 1 - 14 YES                                       |  |  |  |  |
|   | Claims           | No   |  |  |  |  |
| Inventive step (IS)   | Claims           | 1 - 14 YES                                       |  |  |  |  |
|   | Claims           | 1 - 14 YES                                       |  |  |  |  |
| Industrial applicability (IA)   | Claims<br>Claims | 1-14 YES   |  |  |  |  |
|   |                  |  |  |  |  |  |
| 2. Citations and explanations (R  | tule 70.7)       |  |  |  |  |  |
| The following docume  | ents are         | referred to this preliminary examination report: |  |  |  |  |
|   |                  |  |  |  |  |  |
| D1 = JP 2003-8424 A   | ١                |  |  |  |  |  |
| D2 = JP 59-20027 A  |                  |  |  |  |  |  |
| ☐ Novelty and Inventi   | ve step          |  |  |  |  |  |
|   |                  |  |  |  |  |  |
| This application relates to a method of how to prevent peak current in the display memory device which comprises arrays of memory cells, pairs of bit and bit bar line, 1st transfer gate, 2nd transfer gate, and data buffers. The solution of claims $1-14$ is characterized in that signals switching the second transfer gates are derived from a single enable signal, divided into several groups, and the signal for each group has a different time delay.  |                  |  |  |  |  |  |
| D1 and D2 are regarded as the closest prior arts because they recognize the problem of peak current in the display driving circuit. But they do not disclose nor even suggest a display memory device which comprises arrays of memory cells, pairs of bit and bit bar line, 1st transfer gate, 2nd transfer gate, and data buffers, wherein signals switching the 2nd transfer gates are derived from a single enable signal, divided into several groups, and the signal for each group has a different time delay. |                  |  |  |  |  |  |
| Thus, the subject-matter of claims 1 - 14 is considered to be new and to involve an inventive step.   |                  |  |  |  |  |  |
| Industrial applicability The subject-matter of all the claims meets the criteria of PCT Article 33(4) because it is industrially applicable.  |                  |  |  |  |  |  |
|   |                  |  |  |  |  |  |